



EPA Drafts Multimedia Strategy For Priority PBT Pollutants

The Environmental Protection Agency has developed a draft strategy to overcome the remaining challenges in addressing priority persistent, bioaccumulative, and toxic (PBT) pollutants. PBT chemicals partition primarily to water, sediment or soil, and are not removed at rates adequate to prevent their bioaccumulation in aquatic or terrestrial species. Chemicals characterized as suspected persistent bioaccumulators typically have been confirmed as such based on accepted test methods.

These pollutants pose risks because they are toxic, persist in ecosystems, and accumulate in fish, and up the food chain. The PBT challenges remaining stem from the pollutants' ability to travel long distances, to transfer rather easily among air, water, and land, and to linger for generations, making the EPA's traditional single-statute approaches less than the full solution to reducing risks from PBTs. Due to a number of adverse health and ecological effects linked to PBT pollutants – especially mercury, PCBs, and dioxins – the EPA is aiming for further reductions in PBT risks. The EPA is committing, through this strategy, to create an enduring cross-office system that will address the cross-media issues associated with priority PBT pollutants.

The EPA's approach to PBT reductions is as follows:

1. Develop and Implement National Action Plans for Priority PBT Pollutants.

The EPA is initially focusing action on the 12 Level 1 substances: aldrin/dieldrin, benzo(a)pyrene, chlordane, DDT, hexachlorobenzene, alkyl-lead, mercury and compounds, mirex, octachlorostyrene, PCBs, dioxins and furans, and toxaphene. The EPA is developing action plans that will use the full range of its tools to prevent and reduce releases of these 12 (and later other) PBTs. The EPA will analyze PBT pollutant sources and reduction options as bases for grouping pollutants, activities,

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and sectors to maximize efficiencies in achieving reductions. The EPA will integrate and sequence actions within and across action plans, and will seek to leverage these actions on international and industry-sector bases.

Activities ready for near-term action include:

- a. Conduct process-specific and pollution prevention (P2) projects under the mercury action plan, including regulatory actions to reduce mercury and voluntary reductions through potential partnerships with various industries (*e.g.*, chloralkali industry, hospitals using mercury-containing products).
 - b. Focus enforcement and compliance assistance activities on PBTs, analyzing compliance within PBT-related sectors for problems and opportunities. Select industries, sectors, or regulations that would benefit from focused compliance attention/assistance. Target actions with high potential to reduce PBT releases.
 - c. Develop or revise water quality criteria for mercury and other priority PBTs, and revise methodology for mercury water quality criteria.
 - d. Conduct research and analysis on PBTs, especially on mercury emission control approaches for coal-fired utility boilers, and on the transport, fate, and risk management of mercury. Develop P2 options for preventing mercury/dioxin risks from industrial combustion.
 - e. The EPA is actively engaged in international efforts to reduce PBT risks, including the recently negotiated Persistent Organic Pollutants (POPs) and Heavy Metals protocols to the UN Economic Commission for Europe's Long Range Transboundary Air Pollution Convention, the preparation for the upcoming negotiation of a global POPs convention under UN Environmental Program auspices, and the Regional Action Plans on DDT, chlordane, PCBs, and mercury developed under auspices of the North American Commission for Environmental Cooperation.
2. Screen and Select More Priority PBT Pollutants for Action.

The EPA will select additional PBT pollutants for action. The EPA will apply selection criteria in consultation with a technical panel. Candidate chemicals will be those highly scored by the EPA's Waste Minimization Prioritization Tool and other chemicals of high-priority to EPA offices. The EPA will seek internal and external comment on the proposed selection methodology in 1999.

3. Prevent Introduction of New PBTs.

The EPA is acting to prevent new PBT chemicals from entering commerce by: (a) proposing criteria for requiring testing/restrictions on new PBT chemicals; (b) developing a rule to control attempts to re-introduce out-of-use PBT chemicals into commerce; (c) developing incentives to reward the development of lower-risk chemicals as alternatives to PBTs; and (d) documenting how PBT-related screening criteria are taken into account for approval of new pesticides and re-registration of old pesticides.

4. Measure Progress.

The EPA is defining measurable objectives to assess progress. The EPA will use direct and indirect progress measures, including: (a) human health or environmental indicators; (b) chemical release, waste generation or use indicators; and, (c) program activity measures.

An example of how this strategy will work is visible in the EPA's draft Mercury Action Plan now available at <http://www.epa.gov/pbt/hgaction.htm>. It illustrates an action plan that is national and even international in scope, and describes the kinds of actions the EPA may take to reduce risks posed by other priority PBT pollutants. Each substance or group of substances will present its own set of action opportunities.

The *Multimedia Strategy for Persistent, Bioaccumulative, and Toxic (PBT) Pollutants* can be accessed at <http://www.epa.gov/pbt/pbtstrat.htm>, and is also [available from MESO](#) (includes the draft Mercury Action Plan).

Federal Register, Volume 63, Number 221, November 17, 1998, pp. 63926-63928.

Final NPDES Storm Water Multi-Sector General Permit For Industrial Activities Issued, Baseline Industrial General Permit Terminated

The Environmental Protection Agency issued its final modifications to the NPDES Storm Water Multi-Sector General Permit (MSGP) which was first issued on September 29, 1995 (60 FR 50804), and amended on February 9, 1996 (61 FR 5248), February 20, 1996 (61 FR 6412), and September 24, 1996 (61 FR 50020). The EPA has modified the MSGP to authorize storm water discharges from previously excluded facilities so that they may be covered by the MSGP after expiration of EPA's Baseline Industrial General Permit.

The final modified multi-sector storm water permit covers storm water discharges associated with industrial activity in most geographic areas where the EPA is the NPDES permitting authority. In accordance with its long-term permitting strategy, the EPA's intent when issuing the baseline general permit was to cover all of the categories of industrial facilities which may discharge storm water associated with industrial activity as defined at 40 CFR 122.26(b)(14). The baseline permit did include certain generic coverage limitations which are also found in Section I.B.3 of the MSGP. These exclusions include discharges such as those which may contribute to a violation of a water quality standard, and discharges which adversely affect endangered species or their critical habitat.

The EPA reviewed the categories of additional facilities to be added to the MSGP and also considered the coverage and existing requirements of the various sectors/subsectors already included in the MSGP. The new categories of facilities are summarized below. The EPA has also added a new Sector AD which will allow coverage for any regulated storm water discharge associated with industrial activity not described by any of the other sectors.

The new facilities categories are:

1. Medicinal chemicals and botanical products; pharmaceutical preparations; *in vitro* and *in vivo* diagnostic substances; biological products, except diagnostic substances;
2. Petroleum refining;
3. Boot and shoe cut stock and findings (leather soles, inner soles, other boot and finished wood heels);
4. House slippers; men's dress, street and work shoes; women's dress, street and work shoes;
5. Footwear, except rubber, include athletic shoes;
6. Leather gloves and mittens;
7. Luggage and cases;
8. Women's handbags and purses, leather;
9. Personal leather goods, *e.g.*, billfolds, key cases, coin purses, checkbooks, *etc.*;
10. Leather goods, not elsewhere classified, *e.g.*, saddlery, belts, holsters, leather aprons;
11. Glass products, made of purchased glass;
12. Vitreous china plumbing fixtures, and china and earthenware fitting and bathroom accessories;
13. Lime, agricultural/building lime, dolomite, lime plaster;
14. Cut stone and stone products, benches, blackboards, table tops, pedestals, *etc.*;
15. Abrasive products;
16. Asbestos products, tiles, building materials, except paper, insulating pipe coverings;
17. Mineral wool, insulation;
18. Nonmetallic mineral products, not elsewhere classified, plaster of Paris and papier-mâché, *etc.*;
19. Warehousing facilities without trucking services; and
20. Open dumps.

To obtain coverage under the modified MSGP, facilities which acquired extended coverage under the baseline industrial general permit found in accordance with the provisions of the Administrative Procedures Act must submit a Notice of Intent (NOI) not later than 90 days after the effective date of this MSGP modification.

Some differences between the baseline permit and the MSGP and requirements for transferred facilities are described below:

- The EPA is amending Part I.B.6.(ii) to include a reference to Tribal Historic Preservation Officers (THPOs) because MSGP coverage extends to Tribal lands and in recognition of the central role Tribal governments play in the protection of historic resources. Second, the EPA is including guidance and a list of SHPO and THPO addresses in new Addendum I to the MSGP to assist applicants with the certification process for permit eligibility under this condition.
- The Endangered Species Act of 1973 requires Federal Agencies such as EPA to insure, in consultation with the US Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (also known collectively as the "Services") that any actions authorized, funded,

or carried out by the Agency (*e.g.*, EPA-issued NPDES permits authorizing discharges to waters of the United States) are not likely to jeopardize the continued existence of any Federally-listed endangered or threatened species or adversely modify or destroy critical habitat of such species (see 16 USC 1536(a)(2), 50 CFR 402 and 40 CFR 122.49(c)). The EPA also has updated the species list in Addendum H to include species that were listed or proposed for listing since the Addendum H list was compiled on March 31, 1995.

- The EPA has also decided to expand the list to include all of the terrestrial (*i.e.*, non-aquatic) listed and proposed species in recognition that those species may be impacted by permitted activities such as the construction and operation of best management practices (BMPs). The Addendum H list will be updated on a regular basis and an electronic copy of that list will be made available at the Office of Wastewater Management at <http://www.epa.gov/owm>. All dischargers applying for coverage under the MSGP must provide in the application information on the Notice of Intent form: (1) A determination as to whether there are any species identified in Addendum H in proximity to the storm water discharges and BMP construction areas, and (2) a certification that their storm water discharges and the construction of BMPs to control storm water are not likely to adversely affect species identified in Addendum H, or are otherwise eligible for coverage due to a previous authorization under the ESA.
- The EPA recognizes that a new North American Industry Classification System (NAICS) was recently adopted by the Office of Management and Budget (62 FR 17288, April 9, 1997). NAICS replaces the 1987 standard industrial classification (SIC) code system for the collection of statistical economic data.
- Non-storm water discharges are generally not authorized by either the MSGP or the baseline permit. However both permits do authorize a list of minor non-storm discharges such as fire hydrant flushings, potable water sources, routine external building washdown water, uncontaminated ground water and certain other discharges, provided the discharges are identified in the Storm Water Pollution Prevention Plan (SWPPP) and appropriate pollution prevention measures are included for the discharges.
- The MSGP and the baseline general permit include the same conditions pertaining to releases of reportable quantities of hazardous substances and oil.
- The MSGP includes a special condition pertaining to co-located facilities which was not included in the baseline general permit (see 60 FR 50813). If an industrial plant includes co-located facilities which fall into more than one sector of the MSGP, then the sector-specific SWPPP and monitoring requirements for both sectors apply to the plant.
- Facilities which are transferred to the MSGP from the baseline permit will have to review the sector-specific BMP requirements of the MSGP and, as needed, upgrade their SWPPPs to comply with the requirements of the MSGP. SWPPP modification and implementation must occur within 180 days after the effective date of the MSGP modification.
- Both permits require certain additional BMPs for facilities which are required to report for "water priority chemicals." However, the list of such chemicals in the MSGP (Addendum F of the MSGP) differs somewhat from the list in the baseline permit due to changes in EPCRA reporting requirements which occurred subsequent to the issuance of the baseline permit. As

such, facilities transferring to the MSGP should check the MSGP list of “water priorities chemicals” to determine whether the special EPCRA requirements would apply. The baseline permit also requires that the SWPPP for facilities subject to EPCRA Section 313 be certified by a professional engineer every three years. However, the MSGP only requires certification in accordance with the regular signatory requirements of the permit, *i.e.*, by a responsible corporate official. The MSGP also provides an exemption from the EPCRA Section 313 requirements for situations where an operator certifies that all water priority chemicals which are handled and/or stored on-site are only in gaseous or non-soluble liquid or solid forms (at atmospheric pressure and temperature).

- The MSGP differs from the baseline permit with regards to the schedule for analytical monitoring. The baseline permit had required monitoring for certain facilities once or twice each year during the term of the permit. The baseline general permit required grab and composite sampling for most parameters. As an alternative, the baseline permit also provided that one grab sample may be taken from a holding pond with a retention period greater than 24 hours. The requirements of the MSGP, however, have been simplified in that only a grab sample is required for all sectors except Sector S (air transportation) where grab and composite samples are required.
- Both permits provide that facilities need not monitor if they certify that no significant materials or industrial activities are exposed to storm water. For the MSGP, however, the certification is on a pollutant-by-pollutant, outfall-by-outfall basis; *i.e.*, if there are no exposed sources of a particular pollutant, then monitoring for that pollutant at that outfall does not need to be conducted.
- The MSGP also includes an exemption from monitoring (again on a pollutant-by-pollutant basis) in the fourth year of the permit if the monitoring results of the second year are below certain benchmark.
- For facilities which are transferred to the MSGP from the baseline industrial permit, monitoring is not required in year four for particular pollutants if the average of the two most recent monitoring results conducted for the baseline permit are below the benchmarks.
- The MSGP requires that monitoring results be submitted to the permitting authority at the end of each year in which sampling is required (postmarked by March 31 of the year following the monitoring period, *e.g.*, by March 31, 2000, for the year four monitoring period).
- The MSGP includes the same numeric effluent limitations for coal pile runoff as were found in the baseline general permit. The MSGP does authorize certain storm water discharges subject to ELGs including the coal pile runoff at steam electric power plants, and for the following categories: Phosphate fertilizer manufacturing (40 CFR 418), asphalt paving and roofing emulsions (40 CFR 443), and cement manufacturing materials storage pile runoff (40 CFR 411). In addition, the modified MSGP authorizes mine dewatering discharges from construction sand and gravel, industrial sand, and crushed stone facilities (40 CFR 436) in EPA Regions I, II, VI, X and Arizona.

- The MSGP only requires annual monitoring for all of the discharges subject to numeric effluent limits (except mine dewatering discharges in Sector J where the monitoring frequency is quarterly).

The complete text of the final Storm Water Multi Sector General Permit is [available from MESO](#).

Federal Register, Volume 63, Number 189, September 30, 1998, pp. 52430-52577.

WET Draft Policy Expected In Early 1999

By early 1999, the Environmental Protection Agency plans to release a draft policy to promote consistency among states in determining under what conditions whole effluent toxicity (WET) limits should be put into water quality permits. The concept, known as the “reasonable potential” policy, seeks to clarify the implementation requirements for states. Reasonable potential refers to the expectation that a discharge from a facility may cause a toxic effect in the receiving waters. The process of determining whether or not a WET limit is necessary involves running the WET test to determine if the potential for an effluent to have a toxic impact exists. If it does, then the WET limit is to be included in the National Pollution Discharge Elimination System (NPDES) permit. If a WET test limit is exceeded, the facility may be asked to increase monitoring in order to locate the problem. If the problem is an ongoing one, a toxicity reduction evaluation (TRE) may have to be conducted.

With the “reasonable potential” policy finalized, implementation requirements would then be established by the EPA, in addition to providing training and technical support, providing a transition period for permitting authorities, and conducting a WET program oversight.

Environment Reporter, Volume 29, Number 20, September 18, 1998, p. 984.

EPA (Mostly) Approves California §303(d) Waterbody Listing

The EPA partially approved and partially disapproved California’s submittal of water quality limited waterbody segments under Section 303(d) of the Clean Water Act. Specifically, the EPA approved California’s listing of 472 waters and associated priority rankings. The EPA disapproved California’s decisions not to list 37 water quality limited segments and associated pollutants, and an additional 12 pollutants for waterbodies already listed by the State.

These waterbodies are listed in the following table:

REGION	WATERBODY SEGMENTS
North Coast (1)	Stemple Creek, Estero de San Antonio
San Francisco Bay (2)	San Francisco Bay (all segments): Central S.F. Bay, Lower S.F. Bay, South S.F. Bay, Carquinez Strait, Richardson Bay, San Pablo Bay, Suisun Bay, Sacramento San Joaquin Delta
San Francisco Bay (2)	Lake Merritt
San Francisco Bay (2)	Mt. Diablo Creek, Pine Creek, Pinole Creek, Rodeo Creek, San Pablo Creek, Walnut Creek, Wildcat Creek, Laurel Creek, Ledge wood Creek, Suisun Slough, Arroyo Corte Madera del Presidio, Corte Madera Creek, Coyote Creek (Marin County), Gallinas Creek, Miller Creek, Novato Creek, San Antonio Creek, San Rafael Creek, San Mateo Creek, Calabazas Creek, Coyote Creek (Santa Clara County), Guadalupe River, Los Gatos Creek, Matadero Creek, Permanente Creek, San Felipe Creek, San Francisquito Creek, Saratoga Creek, Stevens Creek, Alameda Creek, Arroyo de la Laguna, Arroyo Del Valle, Arroyo Hondo, San Leandro Creek, San Lorenzo Creek
Los Angeles (4)	Santa Clara River, Reaches 7 and 8
Central Valley (5)	Stockton Deep Water Channel

The EPA identified these additional waterbodies and pollutants for inclusion on the 1998 Section 303(d) list. EPA also announced its intention to approve the State's listing of Coyote Creek for toxicity, pending solicitation of public comments concerning this listing decision.

The EPA also added the following pollutants to the list:

1. Seven types of dioxin-like compounds (groups of dioxins, furans, and dioxin-like PCBs which are chemically similar and cause similar health effects),
2. DDT,
3. Dieldrin, and
4. Chlordane.

Federal Register, Volume 63, Number 213, November 4, 1998, pp. 59556-59557.

EPA Eases Regulations Dealing With Hazardous Remediation Waste

EPA issued regulations that will make it easier to treat, store and dispose of hazardous remediation waste. The Hazardous Waste Identification Rule for Contaminated Media (also known as the HWIR-Media Rule) under the Resource Conservation and Recovery Act (RCRA) is expected to eliminate many of the existing regulatory disincentives to remediation, making it faster and easier to cleanup hazardous waste sites. Specifically, the rule:

- Makes it easier to obtain permits for treating, storing and disposing of cleanup wastes;
- Provides that obtaining these permits will not subject owners and/or operators to facility-wide corrective action;
- Creates a new kind of unit called the “staging pile” that allows more flexibility in temporarily storing remediation wastes during cleanup;
- Excludes dredge material from RCRA hazardous waste requirements if the wastes are managed under an appropriate permit under the Marine Protection, Research and Sanctuaries Act or the Clean Water Act; and
- Makes it faster and easier for states to receive authorization when they update their RCRA programs to incorporate revisions to the federal RCRA regulations.

The requirements of this rule are optional for authorized state RCRA programs to adopt because they are less stringent than the existing requirements. The EPA decided not to pursue broad regulatory reform at this time and has chosen to retain the Corrective Action Management Units (CAMU) rule as it currently exists (see 40 CFR Section 264.552). For further information, call the RCRA Hotline at (800) 424-9346 or (703) 412-9810.

EPA Press Release, Friday, November 13, 1998.

EPA To Hold EMAP Symposium On Western Ecological Systems

The Environmental Protection Agency’s Office of Research and Development is sponsoring “The EMAP Symposium on Western Ecological Systems: Status, Issues and New Approaches,” which is to be held on Tuesday, April 6 – Thursday, April 8, 1999 at Holiday Inn Fisherman’s Wharf, San Francisco, CA.

The EMAP symposium is a free, three-day event that will offer the opportunity to exchange information on scientific research within the western United States relating to the EPA’s Environmental Monitoring and Assessment Program (EMAP). EMAP was developed to monitor status and trends in the condition of the nation’s ecological resources through integrated monitoring and assessment approaches to resource management. The first major integrated geographic Pilot study by EMAP was initiated in the mid-

Atlantic region as a component of the Mid-Atlantic Integrated Assessment (MAIA). The next integrated-geographic Pilot study is proposed for the western region of the U.S. (EPA Regions 8, 9, and 10).

The Symposium format will consist of invited platform presentations, poster sessions, and short talk sessions on topics of interest to federal and state agencies, academics institutions, and environmental research. Presentations and demonstrations will range from monitoring and assessment results-to date in the western U.S. to the identification of information gaps relative to critical regional issues. Ecosystems and geographic areas to be represented include coastal and estuarine ecosystems, arid and desert ecosystems, mountain and forested ecosystems, and Great Plains ecosystems.

Further information can be obtained at these websites: <http://www.epa.gov/emap/html/news.html>, <http://www.tpmcsituate.com/symposium>, or by contacting:

- Symposium Coordinator at Technology Planning & Management Corporation, telephone: (781) 544-0026, facsimile: (781) 544-3086, e-mail: symposium@tpmc.com;
- Dr. Shabeg Sandhu, EPA, Symposium Chair, e-mail: Sandhu.Shabeg@epamail.epa.gov; or
- Dr. Brian Melzian, EPA, Symposium Co-Chair, e-mail: Melzian.Brian@epamail.epa.gov.

Workshop On Contaminated Sediment Management

While extensive technology development has been carried out by industry and the DOD in the many areas of environmental management, contaminated sediments are still not a straightforward management issue for the Navy or for others. The Office of Naval Research and the Naval Facilities Engineering Command (NAVFACENGCOM) tasked the Space and Naval Warfare Systems Center, San Diego, to organize a workshop and prepare a report to identify problems, remediation approaches, technology gaps, and needs relative to managing contaminated Navy sediments in an integrated, cost-effective way. For the RDT&E community to effectively contribute to these issues, it is necessary to have the Navy personnel who manage sediments in the field identify and discuss their needs, problems, concerns, and successful strategies.

To this end, a workshop was held in San Diego from October 14-16, 1998. The goal was to obtain user community input to assure that sediment-related RDT&E is user-driven. This workshop brought together the Navy personnel who are responsible for managing contaminated sediments (for both maintenance and construction dredging and site cleanup/BRAC/IR), and the RDT&E community. More than 60 attendees, from the Engineering Field Divisions, Navy Laboratories, NAVFACENGCOM, Navy and Marine Activities, an EPA lab and the Army Corps of Engineers, took part in the workshop.

A range of sediment management issues were identified and discussed, successful approaches to sediment management problems were shared with other Navy activities, and technology and infrastructure needs were identified. The issues discussed included the regulatory framework, environmental data access and management, site assessment and screening, data interpretation, ecological

risk assessment, disposal and remedial options, sediment management resources available, sediment impact from land-based sites, and how to get a handle on the magnitude of the Navy-wide sediment problem.

An Initiation Decision Report (IDR) is being prepared that summarizes the state of technology, technology gaps, and methods to integrate sediment management that will help the Navy manage contaminated sediment cost effectively. This should also provide information which will help the Navy invest its RDT&E resources on appropriate technology development.

For further information, contact Dr. Sabine Apitz, SPAWARSYSCEN D361, 53475 Strothe Road, San Diego, CA 92152, e-mail d361@spawar.navy.mil.

About the *Marine Environmental Update*

This newsletter is produced quarterly by the Marine Environmental Support Office (MESO), and is dedicated specifically to inform the Navy about marine environmental issues that may influence how the Navy conducts its operations. MESO is located at the Space and Naval Warfare Systems Center, San Diego, California. The mission of MESO is to provide Navy-wide technical and scientific support on marine environmental science, protection and compliance issues. This support covers a broad spectrum of activities, including routine requests for data and information, technical review and consultation, laboratory and field studies, comprehensive environmental assessments, and technology transfer. Significant developments in marine environmental law, policy, and scientific advancements will be included in the newsletter, along with references and points of contact for further information.

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